

REMARKS

The Abstract has been amended to conform with USPTO guidelines.

Claim 1 has been amended to incorporate therein the recitation of claims 3, 4 and 7.

Claims 2, 3, 4 and 7 have been canceled. Claim 16 has been amended to incorporate therein the recitation of claims 4 and 19. Claim 19 has been canceled.

In response to the rejection under 35 U.S.C. § 112, second paragraph, claim 1 has been amended to more clearly recite that the invention is directed to a method of purifying a treatment target substance containing a fluorine-containing surfactant which comprises removing at least part of the fluorine-containing surfactant from the treatment target substance by contacting the treatment target substance with a substance [A] comprising carbon dioxide. Claims 5 and 6 have been amended to conform to the amendment to claim 1. Claim 16 has been amended to more clearly recite that the invention is directed to a method of producing an aggregate for the production of the aggregate comprising a polymer, which comprises coagulating an aqueous dispersion containing fluorine-containing surfactant in which a particle comprising said polymer is dispersed and removing at least part of the fluorine-containing surfactant by contacting the aqueous dispersion with a substance [A] comprising carbon dioxide. Claim 17 has been amended to conform with the amendment to claim 16.

It is respectfully submitted that the claims as amended fully comply with 35 U.S.C. § 112, and withdrawal of the foregoing rejection is respectfully requested.

Claims 1-20 were rejected under 35 U.S.C. § 102(a), (b) or (e) as being anticipated by EP 0 442 679 (EP '679) or U.S. Patent 5,780,565 (U.S. '565).

Claims 1-20 were also rejected under 35 U.S.C. § 103(a) as being unpatentable over EP '679 or U.S. '565.

Applicants traverse, and respectfully request the Examiner to reconsider in view of the amendment to the claims and the following remarks.

Claim 1:

The invention of claim 1 is directed to a method for removing surfactants represented by general formulae (1) and (2), and requires a treatment target substance containing water.

Water dramatically improves the removal efficiency of the specific surfactant defined by formulae (1) and (2). Figs. 9 and 10 of the present specification demonstrate this unexpected effect. On the other hand, EP '679 discloses purifying a polymer latex by treating with high pressure solvent in order to remove low molecular weight impurities (Abstract).

U.S. '565 discloses a process of making a polymer, which comprises the step of providing a polymerizing system including a homogenous reaction mixture and a dispersing agent (claim 1). Examples of the dispersing agents are described in col. 9.

However, neither EP '679 nor U.S. '565 discloses removal of surfactants defined by formulae (1) and (2) and the addition/presence of water to improve the removal efficiency of the specific surfactants.

For the above reasons, it is respectfully submitted that claims 1, 5, 6 and 8-15 define novel subject matter and are patentable over each of EP '679 and U.S. '565.

Claim 16:

The invention of claim 16 is directed to a method which comprises coagulating a fluoropolymer aqueous dispersion and removing fluorine-containing surfactants at the same time.

The combination of a fluoropolymer and a fluorine-containing surfactant achieves the simultaneous treatment of the invention.

On the other hand, EP '679 discloses purifying a polymer latex by treating with high pressure solvent in order to move low molecular weight impurities (Abstract). However, EP '679 does not disclose a fluoropolymer and a fluorine-containing surfactant, or more particularly, coagulating an aqueous dispersion containing a fluorine-containing surfactant in which aqueous dispersion a particle comprising a fluoropolymer is dispersed and also removing at least part of the fluorine-containing surfactant from the aqueous dispersion.

U.S. '565 does not disclose removal of dispersing agents and therefore does not disclose the method of the present invention.

Therefore, each of EP '679 and U.S. '565 neither teaches nor suggests the claimed invention. Also, there is no apparent reason which would lead one of ordinary skill in the art to combine the cited references.

Accordingly, it is respectfully submitted that claims 16-18 and 20 define novel subject matter and are patentable over each of EP '679 and U.S. '565.

Withdrawal of the foregoing rejections is respectfully requested.

Claims 1-20 were provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-12 of copending Application No. 10/525,847. Claims 1-20 were also rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent 7,173,098.

Applicants respectfully traverse.

The claims of Application No. 10/525,847 and U.S. Patent 7,173,098 are directed to a polymerization process. They do not disclose removal of fluorine-containing surfactants by contacting with carbon dioxide as required by the present claims.

Withdrawal of the foregoing rejections is respectfully requested.

Claims 1-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by JP 2004-198340. Applicants respectfully traverse.

JP 2004-198340 is Applicants' Japanese application filed July 5, 2004 and laid-open (i.e., published) on October 20, 2005 as JP 2005-290350. See the attached bibliographic data. The inventorship entity is identical.

Because JP 2005-290350 was not published more than one year prior to the July 5, 2004 PCT filing date of the present application, it is not available as prior art under §102(b).

Withdrawal of the foregoing rejection is respectfully requested.

Claims 1-20 were objected to under 37 C.F.R. § 1.75 as being a substantial duplicate of the claims in JP 2004-198340.

Applicants respond as follows.

The prohibition against double patenting under 35 U.S.C. § 101 pertains only to U.S. patents and U.S. patent applications. 37 C.F.R. § 1.75(b) provides that more than one claim may be presented in the same U.S. application provided they differ substantially from each other, and does not apply to foreign applications. The objection is not well founded. Otherwise, one could not obtain corresponding foreign patents containing substantially the same claims as in a U.S. counterpart, which is not the case.

Withdrawal of the objection is respectfully requested.

Withdrawal of all rejections and allowance of claims 1, 5, 6, 8-18 and 20 is earnestly solicited.

In the event that the Examiner believes that it may be helpful to advance the prosecution of this application, the Examiner is invited to contact the undersigned at the local Washington, D.C. telephone number indicated below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CUSTOMER NUMBER

Date: April 25, 2008

**REFINING PROCESS FOR PROCESSING OBJECT AND COAGULUM
PREPARATION PROCESS****Publication number:** JP2005290350**Publication date:** 2005-10-20**Inventor:** NAKATANI HIDEKI; YABU TADAHIRO; TSUKAMOTO
MITSURO; OTOI KENJI; HIRAGA YOSHIYUKI;
IMAHORI YUJI**Applicant:** DAIKIN IND LTD**Classification:****- International:** C08F6/16; C08F6/00; (IPC1-7): C08F6/16**- European:****Application number:** JP20040198340 20040705**Priority number(s):** JP20030191416 20030703; JP20040071744 20040312;
JP20040198340 20040705

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Abstract of JP2005290350**PROBLEM TO BE SOLVED:** To provide a process for removing fluorine-containing surfactant from a processing object containing a fluorine-containing surfactant and a process for preparing a coagulum comprising a polymer from an aqueous dispersion.**SOLUTION:** In this refining process for a processing object, a material [A] is made to contact with a processing object containing a fluorine-containing surfactant to carry out a removing process of the fluorine-containing surfactant. The material [A] is in the state of gas at the standard condition (10⁻⁵ Pa and 0[deg.]C).**COPYRIGHT:** (C)2006,JPO&NCIPData supplied from the **esp@cenet** database - Worldwide